

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	F	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/770,518	(01/26/2001	Pierre Messier	CLW 2 0142	5871	
24964	7590	12/01/2005		EXAMINER		
GOODWIN			CHORВАЛ, MONZER R			
103 EISENF ROSELANI				ART UNIT	PAPER NUMBER	
				1744	. <u> </u>	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			16
	Application No.	Applicant(s)	
	09/770,518	MESSIER ET AL.	
Office Action Summary	Examiner	Art Unit	
	MONZER R. CHORBAJI	1744	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with	the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFI after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNICA R 1.136(a). In no event, however, may a repl to priod will apply and will expire SIX (6) MONTH tatute, cause the application to become ABAN	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 1	8 October 2005.		
2a)☐ This action is FINAL . 2b)⊠ 1	This action is non-final.		
3) Since this application is in condition for allo		-	
closed in accordance with the practice und	er <i>Ex parte Quayl</i> e, 1935 C.D. 1	1, 453 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 52,55,56,62,64-66,69,70,76,78-80 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 52,55,56,62,64-66,69,70,76,78-80 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	drawn from consideration. 0,83,84,90,92 <u>and 93</u> is/are rejec		
Application Papers	,		
9)☐ The specification is objected to by the Exam 10)☒ The drawing(s) filed on 25 June 2001 is/are		d to by the Examiner.	
Applicant may not request that any objection to			
Replacement drawing sheet(s) including the cor		- , ,	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	ents have been received. Lents have been received in Apportionity documents have been received (PCT Rule 17.2(a)).	lication No ceived in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date		mary (PTO-413) ail Date mal Patent Application (PTO-152)	

Application/Control Number: 09/770,518 Page 2

Art Unit: 1744

DETAILED ACTION

This non-final action is in response to the RCE/amendment received on 10/18/2005

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1744

4. Claims 52, 55-56, 62, 64-66, 69-70, 76, 78-80, 83-84, 90 and 92-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petri (EP 0842 605 A1) in view of Monticello et al (U.S.P.N. 5,891,392).

With respect to claims 52, 66 and 80, the Petri reference discloses a method (page 3, numbered lines 20-21) for spraying a disinfectant composition (page 3, lines 22-23) in aerosol form (page 9, numbered lines 53-54) on inanimate surfaces (page 10, numbered lines 2-10) that includes the following: about 11% by volume of hydrogen peroxide (page 3, numbered lines 44-45 and converting 15% by weight using the density value for hydrogen peroxide at 20 degree Celsius to be 1.45 g/ml), about 12% by volume of Geraniol as antimicrobial active of essential oil (page 3, numbered lines 47-48 and page 4, numbered line 3 and converting 10 % by weight using the density value of Geraniol to be 0.877 g/ml), about 9% by volume of polyacrylic acid as shear thinning polymeric thickener (page 4, numbered lines 10-11, page 4, numbered line 21, page 5. numbered lines 1-3 and converting 10% by weight using the density value for polyacrylic acid of 1.09 g/ml), about 3% by volume of malonic acid as an optional ingredient chelating agent (page 8, numbered lines 52-57 and converting 5% by weight using the density value for malonic acid to be 1.619 g/ml), about 4% by volume of catechol as an optional ingredient radical scavenger (page 9, numbered lines 2, page 9, numbered line 7, page 9, numbered lines 13-15 and converting 5% by weight using the density value for catechol to be 1.3 g/ml), 13% by volume of ethanol as an optional ingredient solvent (page 9, numbered lines 26-27 and converting 10 % by weight using the density value for ethanol at 20 degree Celsius to be 0.79 g/ml, equivalent to the

flash vaporization component having two carbon atoms) and about 47% by volume of water up to 100% (page 5, numbered lines 45-46). For example, density of Hydrogen peroxide at 20 degree Celsius is 1.45 g/ml. (15g) x (1/1.45 ml/g) = 10 ml. The Petri reference further teaches that upon spraying the composition onto a hard surface, no residues (page 10, numbered lines 11-13) are left (equivalent to leaving an essentially dry surface having anti-microbial agent deposited upon). The Petri reference further teaches that the compositions are packaged in spray dispensing containers (page 9, numbered lines 37-54) that intrinsically include spray nozzles for spraying the composition onto hard surfaces in an aerosol form. However, with respect to claims 52, 66 and 80, the Petri reference fails to teach higher concentration values for ethanol. The Monticello reference, which is in the art of designing aqueous hard surface disinfectant compositions that include hydrogen peroxide, teaches the concentration range for ethanol is between 0.1-20% weight (col.2, lines 26-30). For example, based on the Petri composition explained above, 26% by volume of ethanol as an optional ingredient solvent (page 9, numbered lines 26-27 and converting 20 % by weight using the density value for ethanol at 20 degree Celsius to be 0.79 g/ml, equivalent to the flash vaporization component having two carbon atoms) and about 47% by volume of water up to 100% (page 5, numbered lines 45-46). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method and composition of the Petri reference by increasing the concentration of ethanol as taught by the Monticello reference since in a concentration range of 0.1-20% weight

Page 4

Art Unit: 1744

ethanol provide an overall reduction in the amount of volatile organic materials while providing surprisingly excellent disinfecting properties (col.2, lines 38-41).

With respect to claims 55-56, 69-70 and 83-84, the Petri reference teaches including ethanol (page 9, numbered lines 26-27) in the disinfectant composition.

With regard to claims 62, 76 and 90, the Petri reference discloses a method (page 3, numbered lines 20-21) for spraying a disinfectant composition (page 3, lines 22-23) in aerosol form (page 9, numbered lines 53-54) on inanimate surfaces (page 10, numbered lines 2-10) that includes about 11% by volume of hydrogen peroxide (page 3, numbered lines 44-45 and converting 15% by weight using the density value for hydrogen peroxide at 20 degree Celsius to be 1.45 g/ml).

With respect to claims 64-65, 78-79 and 92-93, the Petri reference teaches including ethanol (page 9, numbered lines 26-27) in the disinfectant composition.

Response to Arguments

5. Applicant's arguments with respect to claims 52, 55-56, 62, 64-66, 69-70, 76, 78-80, 83-84, 90 and 92-93 have been considered but are moot in view of the new ground(s) of rejection.

The Monticello reference (newly applied reference), which is in the art of designing aqueous hard surface disinfectant compositions that include hydrogen peroxide, teaches the concentration range for ethanol is between 0.1-20% weight (col.2, lines 26-30). For example, based on the Petri composition explained above, 26% by volume of ethanol as an optional ingredient solvent (page 9, numbered lines 26-27 and converting 20 % by weight using the density value for ethanol at 20 degree Celsius to

Application/Control Number: 09/770,518 Page 6

Art Unit: 1744

be 0.79 g/ml, equivalent to the flash vaporization component having two carbon atoms). Furthermore, based on the above calculations, 15% or 12% by weight as taught by the Monticello reference are equivalents to 20% or 16% by volume respectively.

On page 8 of the Remarks section, applicant argues that, "Since Petri teaches the use of ingredients such as antimicrobial actives of essential oils, polymeric thickeners and optional surfactants which do not vaporize quickly, it teaches away from flash-dry compositions." The examiner disagrees. With regard to essential oils, optional polymeric thickeners and optional surfactants, their inclusion does not mean that the composition of the Petri reference is not a flash-dry composition. In fact, on page 10, numbered lines 11-13, the Petri reference teaches that upon spraying the composition onto a hard surface, no residues are left (equivalent to leaving an essentially dry surface having anti-microbial agent deposited upon).

On page 8 of the Remarks section, applicant argues that, "Petri provides no motivation to select a lower alcohol containing 1 to 6 carbon atoms from a long list of suitable solvents listed in Petri." The examiner disagrees since on page 9 of the Petri reference a limited group of solvents is provided and an explicit teaching that ethanol is one of five compounds that are suitable to be included in the composition.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Belfer et al (U.S.P.N. 6,106,854) reference, the Monticello et al (U.S.P.N. 5,891,392) reference and the Monticello et al (U.S.P.N. 6,106,774) reference

Application/Control Number: 09/770,518

Art Unit: 1744

all disclose adding ethanol to disinfecting compositions in the concentration range of

Page 7

0.1-20% by weight or 35.0-50% by weight.

7. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MONZER R. CHORBAJI whose telephone number is

(571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, RICHARD D. CRISPINO can be reached on (571) 272-1226. The fax

phone number for the organization where this application or proceeding is assigned is

571-273-8300.

9. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Monzer R. Chorbaji

Patent Examiner

AU 1744

11/28/2005

RICHARD CRISPINO SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1700